

ABSTRACT OF THE DISCLOSURE

A cancer detection system having a plurality of ultrasonic sensors positioned about a garment worn over at least one breast. The sensors transmit a signal that is received by the other sensors. A processor records the amplitude and time-of-
5 flight of the received signals. The signals include both direct line-of-flight signals and reflected signals. In one embodiment, the processor performs tissue structure analysis. In another embodiment, the recorded data is sent to a remote processor for long term storage, tissue structure analysis, and/or addition to a chronological profile.